

# 15V, 1A Rectifier

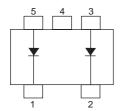
## **Applications**

• High frequency rectification (switching regulators, converters, choppers).

#### **Features**

- Low forward voltage (IF=0.5A, VF max=0.35V) (IF=1.0A, VF max=0.4V).
- Short reverse recovery time(t<sub>rr</sub> max.=15ns).
- Composite type with 2 low VF SBDs in one package, facilitating high-density mounting.
- The SBS804 is composed of 2 chips that are equivalent to the SBS004.

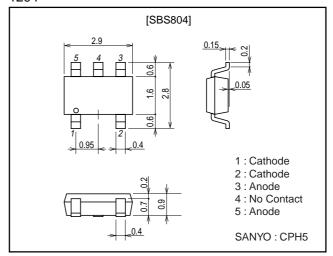
### **Electrical Connection**



- 1: Cathode
- 2 : Cathode
- 3 : Anode
- 4 : No Contact
- 5 : Anode

## **Package Dimensions**

unit : mm 1294



## **Specifications**

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		15	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		15	V
Average Output Current	lo		1	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	10	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

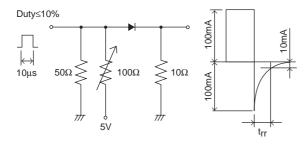
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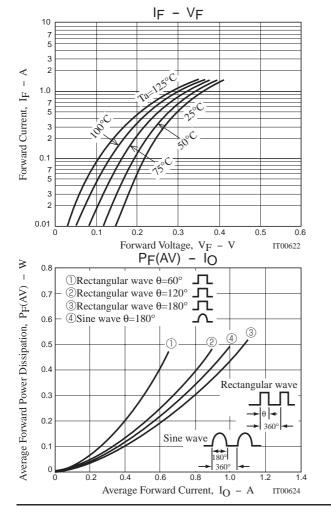
#### Electrical Characteristics at Ta=25°C

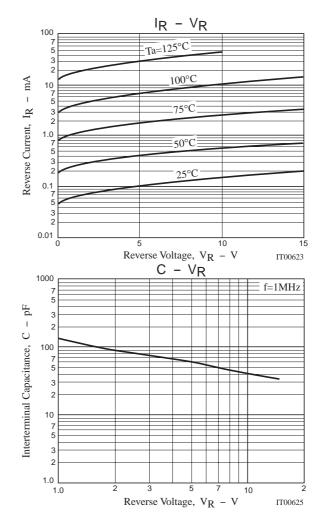
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	٧R	I <sub>R</sub> =1mA	15			V
Forward Voltage	V <sub>F</sub> 1	IF=0.5A		0.30	0.35	V
	V <sub>F</sub> 2	I <sub>F</sub> =1A		0.35	0.40	V
Reverse Current	IR	V <sub>R</sub> =6V			500	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		42		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =100mA, See specified Test Circuit.			15	ns
Therminal Resistance	Rth(j-a)	Mounted on a ceramic board (600mm <sup>2</sup> X0.8mm)		110		°C/W

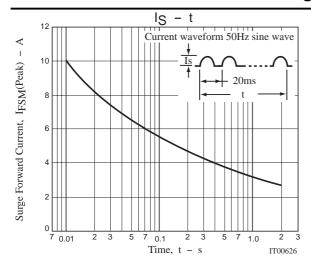
Marking : SC

## **Switching Time Test Circuit**









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